Amendments to the Specification:

Please replace the first complete paragraph on page 7 with the following amended paragraph:

In a second major aspect of the invention, the inventors appreciate that having ~~ahving~~ a matrix possessing a low CTE goes a long way to producing a composite having a low CTE overall. Si/SiC composites, e.g., those made by reactive infiltration of a melt of silicon into a mass containing carbon, intrinsically possess a relatively low CTE. For most of the prior applications, however, (e.g., high temperature applications) materials engineers tended to prefer composites having large fractions of SiC and low fractions of Si. The instant inventors, particularly in view of the above analysis regarding elastic modulus, instead prefer the contrary phase assemblage: high fractions of Si metal and low fractions of SiC. The instant inventors realize that, once is inherent brittleness is dealt with, silicon is actually a very desirable engineering material where low CTE is desired. Because the matrix already possesses a low CTE, the instant inventors have realized that composites can be produced that have CTE less than 2.7 (CTE of Si and SiC), provided that the CTE of the reinforcement is less than this amount. Thus, reinforcements having negative CTE, while still desirable, are not mandated by this aspect of the invention. Accordingly, low CTE composites can be produced using low cost carbon fibers having a zero or positive (although still quite low) CTE. Further, an isotropic or quasi-isotropic arrangement of the fibers, though still desirable in certain applications, is not mandated by this aspect of the invention. In this composite system, however, the carbon fibers need to be protected chemically from the molten silicon, and the present invention illustrates techniques for accomplishing same. Providing at least a degree of toughness or impact resistance can also be realized in these composites.

C1

Please replace the first complete paragraph on page 19 with the following amended paragraph, which is supported, for example, by original claim 1:

C2

Accordingly, in a first preferred embodiment of the second aspect of the instant invention, carbon fibers are coated with a plurality of coatings, at least one of the coatings being a debond coating such as boron nitride, which is then followed by a coating that is protective of the debond coating, such as silicon carbide. These ceramic coatings can substantially rigidize the fibers, so sometimes it is necessary to organize the arrangement or geometry of the fibers into the desired bulk shape, e.g., a preform, prior to the fiber coating process. A reactable source of carbon such as carbon paint is then supplied to the arranged fibers, generally no more than about <u>10</u> percent by weight, to complete the preform. The preform optionally may be green machined. Upon pyrolysis of the carbon source, the preform is contacted with a source of molten silicon metal or alloy, which soaks into the porous preform, assisted by chemical reaction of the molten silicon with the supplied reactable carbon. Solidification of the infiltrated silicon or alloy yields a composite body.

Please replace the first complete paragraph on page 20 with the following amended paragraph, which is supported, for example, by original claim 4:

C3

Porous preforms of the carbon fibers already embedded in pyrolyzed carbon matrices are commercially available, and are typically supplied as so-called "zero stage" carbon/carbon composites. More specifically, the carbon fibers are supplied in a fixed arrangement in a carbonaceous matrix, such as epoxy. The carbon/carbon composite typically is supplied as a ply or sheet, with the carbon fibers lying in the plane of the sheet. The fibers may be highly organized, as in a woven structure, or may be randomly arranged as in a mat. The carbon/carbon composite is supplied in a porous condition, or at least develops pores upon pyrolysis of the carbon matrix. Upon contact with the molten silicon or its alloy, the latter can infiltrate the porous carbon/carbon [[c/c]] composite, and the silicon reacts with at least a portion (generally only a portion) of the carbon matrix to form at least some SiC in the matrix, along with residual Si or Si alloy. Ideally, the carbon fibers are protected from the molten silicon by the carbon matrix, thereby leaving a composite body comprising carbon fibers and a matrix comprising SiC, Si (alloy) and usually also some residual carbon, often in the form of a zone of carbon disposed between the fibers and the matrix.